



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,309	10/22/2001	Detlef Lauk	R.36445	2314

2119 7590 03/29/2004

RONALD E. GREIGG
GREIGG & GREIGG P.L.L.C.
1423 POWHATAN STREET, UNIT ONE
ALEXANDRIA, VA 22314

EXAMINER

MOHANDESI, IRAJ A

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,309

Applicant(s)

LAUK, DETLEF

Examiner

Iraj A Mohandesi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☐ Claim(s) 18-23, 27-38, 41-43 is/are rejected.
- 7) ☒ Claim(s) 25, 26, 39 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the pole housing being one piece with gear housing as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Applicant argument is not persuasive.

The drawings do not show a "one piece housing. The gear housing 10 is separated by "short circuit " element 10 as Fig. 1 demonstrates.

2. Claims 27,28,41 and 42 have been amended. *Claim Rejections - 35 USC § 112* has been withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 18-21,23,27,28,30,34-36,38,39,41-43** are rejected under 35 U.S.C. 102(b) as being anticipated by **Kobman US patent 5,925,962**.

Art Unit: 2834

Regarding claim 18,43 **Kobman'962** discloses an electric motor an electric motor (22), having a rotor (42,column 3,line 21,Fig.1) with a shaft (44) and a pole housing (26, the case ,column 3,line 16, Fig.1), the pole housing (26) including an end shield (30 end cap, column 3,line 17,Fig.1), a motor bearing (column 10,line 42) for the rotor (42), and at least one magnet (40, column 3,line 21,Fig.1) and a short-circuit element (see Fig. 1 for the element connecting the pole hosing 30 to the gear housing 28 above the magnet 40 ,yoke), and a one- or multi-part gear housing (28,covering a gear and rotor assembly see column 3,line 17), connected to the pole housing (26, Fig.1), the pole housing (26) being in one piece with at least one pad of said gear housing (28, see the connection of 26 to 28 ,the pole housing overlapping the gear housing making one piece) and at least one magnet (40) rests in pad directly against the pole housing (26) and is held at least in part directly by the pole housing (where 26 and 30 join together see Fig.1).

Regarding claims 19, 20,21,23,38 the pole housing (26) is formed of plastic (see abstract), one magnet (40) is injected at least partly into the pole housing (26), the short-circuit element (magnet yoke) embodied in one piece (see Fig.1).

Regarding claims 27,28,30,41,42 **Kobman'962** discloses an electric motor an electric motor ,wherein in the pole housing at least one magnet is secured in place (Fig.1) and by engagement with the shod-circuit element (yoke) located radially outward and the pole housing (26), the shod-circuit element (yoke) is secured by engagement against a shoulder formed (see shoulder form of the 30 and 26 and the yoke Fig.1).

Regarding claims 34--36,39 **Kobman'962** discloses an electric motor an electric motor teaches a shaft (44) is supported, oriented toward the gear housing (28), in an armature bearing (column10,line 45) which is at least partly surrounded by the material of the pole housing and at least one magnet (40) is partly surrounded by the pole housing (28 Fig.1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kobman'962** in view of **Bobay US patent 6,286,199**.

Kobman'962 teaches all limitation of the claimed invention except the end shield is secured to the housing by adhesive bonding ,ultrasonic welding and by heat treatment.

Bobay'199 discloses a method for assembly of motor using adhesive bonding, ultrasonic welding heat treatment to connect the housing with plastic rim for the purpose of bonding and securing the housing to the end rim (column 2, line 14see detailed description DETX 4 for heat staking, ultrasonic welding and DETX 8 for adhesive).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide to **Kobman'962** motor the method for assembly of motor using adhesive bonding, ultrasonic welding heat treatment to connect the housing

Art Unit: 2834

to the plastic rim as taught by **Bobay'199** for the purpose of bonding and securing the housing to the end shield.

7. Claims 22 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kobman'962** as applied to claims **18-21,23,27,30,34-36,38,41-43** above, and further in view of **Kabatnik US patent 5,881,823**.

Bobay'199 fails to teach an electric motor an electric motor having a short circuit element (holding cover) comprises at least two shells.

Kabatnik'823 teaches an electric motor having a holding cover comprises at least two shells (50, Fig. 2).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine **Kobman'962** motor with a holding cover comprises at least two shells for purpose of simplifying the assembly as taught by **Kabatnik'823**.

Allowable Subject Matter

8. Claims 25,26,29,39,40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 25, the prior art of the record in particular **Kobman'962** nor **Bobay'199** do not teach or suggest a supporting structure for an electric drive for a vehicle including inter alia a short-circuit element has a protrusion , which is surrounded by the plastic comprising the pole housing.

Regarding claim 26, the prior art of the record in particular **Kobman'962** nor **Bobay'199**

Art Unit: 2834

do not teach or suggest a supporting structure for an electric drive for a vehicle including inter alia at least one magnet has a protrusion that is surrounded by the plastic comprising the pole housing .

regarding claim 29 ,the prior art of the record in particular **Kobman'962** nor **Bobay'199**

do not teach or suggest a supporting structure for an electric drive for a vehicle including inter alia an end shield is embodied in one piece with the motor bearing , and the end shield is insertable into the pole housing .

Regarding 39, the prior art of the record in particular **Kobman'962** nor **Bobay'199**

do not teach or suggest a supporting structure for an electric drive for a vehicle including inter alia a short-circuit element comprising a mixture of plastic and magnetically conducted material ,which is partly surrounded by the material of the pole housing .

Regarding 40 , the prior art of the record in particular **Kobman'962** nor **Bobay'199**

do not teach or suggest a supporting structure for an electric drive for a vehicle including inter alia at least one magnet has a protrusion that is surrounded by the plastic comprising the pole housing .

9. Claim 24 is allowable.

The following is an examiner's statement of reasons for allowance:

The prior art of the record in particular **Kobman'962** nor **Bobay'199** do not teach or suggest a supporting structure for an electric drive for a vehicle including inter alia a short-circuit element comprising a mixture of plastic and magnetically conducted material, is at least partly surrounded by the material of the pole housing .

Art Unit: 2834

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Communication

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is 571-272-2028. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-4099. The fax phone number for the organization where this application or proceeding is assigned is 571-273-2028

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-0377.

Im March 19, 2004


BURTON S. MULLINS
PRIMARY EXAMINER